MODULE 1
Preparatory

Lesson 1-1
Introduction to Emergency Care

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level
2 = Application level
3 = Problem-solving level

Cognitive Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-1.1	Define Emergency Medical Services (EMS) systems.(C-1)
1-1.2	Describe the roles and responsibilities of the EMT-Basic.
1-1.3	Differentiate the roles and responsibilities of the EMT-Basic from other prehospital care providers.(C-3)
1-1.4	Describe the roles and responsibilities related to personal safety.(C-1)
1-1.5	Discuss the roles and responsibilities of the EMT-Basic towards the safety of the crew, the patient and bystanders.(C-1)
1-1.6	Define quality improvement and discuss the EMT-Basic's role in the process.
1-1.7	Define medical direction and discuss the EMT-Basic's role in the process.(C-1)
1-1.8	State the specific statutes and regulations in your state regarding the EMS system.(C-1)
1-1.9	Describe the various methods used to access the EMS system in your community.(C-1)

Affective Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-1.10	Describe desirable attributes and conduct of the EMT-Basic.(A-3)

Psychomotor Objectives

No psychomotor objectives identified.

Preparation

Motivation:	The field of prehospital emergency medical care is an evolving profession in which the reality of life and death is confronted at a moment's notice. EMS has developed from the days when the local funeral home and other services served as the ambulance provider to a far more sophisticated system today. EMT-Basics work side by side with other health care professionals to help deliver professional prehospital emergency medical care. This course is designed to help the new EMT-Basic gain the knowledge, skills and attitude necessary to be a competent, productive, and valuable member of the emergency medical services team.
Prerequisites:	None

MATERIALS

AV Equipment:	Utilize various audio-visual materials relating to emergency medical care. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.
EMS Equipment:	None required.

PERSONNEL

Primary Instructor:	One EMT-Basic instructor knowledgeable in EMT-Basic course overview, administrative paperwork, certification requirements, Americans with Disabilities Act issues, and roles and responsibilities of the EMT-Basic.
Assistant Instructor:	None required.
Recommended Minimum Time to Complete:	One and a half hours

Presentation

Declarative (What)

I. Course Overview
   - A. Paperwork
     1. Local
     2. State
   - B. Course description and expectations
   - C. Immunizations/physical exam
   - D. Review criteria for certification
     1. Successful course completion
     2. Mentally/physically meet criteria of safe and effective practice of job functions
     3. Practical examination
     4. Written examination
     5. State and local provisions
     6. Recertification requirements
   - E. Implications of Americans with Disabilities Act (ADA) - state and local policies
   - F. Implications of harassment - state and local policies

II. The Emergency Medical Services System and the Emergency Medical Technician-Basic
   - A. Overview of the Emergency Medical Services system.
     An EMS system should include all of the following components:
     1. Regulation and policy
     2. Resource management
     3. Human resources and training
     4. Transportation
     5. Facilities
     6. Communications
     7. Public information and education
     8. Medical direction
     9. Trauma systems
     10. Evaluation
   - B. Access to the system
     1. 9-1-1
     2. Non 9-1-1
   - C. Levels of training
     1. Certified First Responder
     2. EMT-Basic
     3. EMT-Intermediate
     4. EMT-Critical Care
     5. EMT-Paramedic
   - D. The health care system

1. Emergency departments
2. Specialty facilities
    a. Trauma centers
    b. Burn centers
    c. Pediatric centers
    d. Poison centers
    e. Other specialty centers - locally dependent

E. Hospital personnel
1. Physicians
2. Nurses
3. Other health professionals

F. Liaison with other public safety workers
1. Local law enforcement
2. State and federal law enforcement

G. Overview of the local EMS system
1. Dispatch
2. Agencies types
3. Hospital resources
4. Other resources

H. Roles and Responsibilities of the EMT-Basic
1. Personal safety
2. Safety of crew, patient and bystanders
3. Patient assessment
4. Patient care based on assessment findings
5. Lifting and moving patients safely
6. Transport/transfer of care
7. Record keeping/data collection
8. Patient advocacy (patient rights) - patient as a whole

I. Professional attributes
1. Appearance
    a. Neat
    b. Clean
    c. Positive image
2. Maintains up-to-date knowledge and skills
    a. Continuing education
    b. Refresher courses
3. Puts patient's needs as a priority without endangering self.
4. Maintains current knowledge of local, state, and national issues affecting EMS.

J. Quality improvement
1. Definition - a system of internal/external reviews and audits of all aspects of an EMS system so as to identify those aspects needing improvement to assure that the public receives the highest quality of prehospital care.
2. The role of the EMT-Basic in quality improvement
    a. Documentation

b. Run reviews and audits
c. Gathering feedback from patients and hospital staff
d. Conducting preventative maintenance
e. Continuing education
f. Skill maintenance

K. Medical direction
1. Definition
a. A physician responsible for the clinical and patient care aspects of an EMS system.
b. Every ambulance service/rescue squad must have physician medical direction.
c. Types of medical direction
(1) On-line
(a) Telephone
(b) Radio
(2) Off-line
(a) Protocols
(b) Standing orders
d. Responsible for reviewing quality improvement
2. The relationship of the EMT-Basic to medical direction
a. Designated agent of the physician
b. Care rendered is considered an extension of the medical director's authority (varies by state law).

L. Specific statutes and regulations regarding EMS in your state
1. Public Health Law Article 30
2. Part 800
3. Local regulations and protocols, if any.
4. Vehicle and Traffic Law - Appropriate sections regarding operation of emergency vehicles.

Suggested Application

Procedural (How)

None identified for this lesson.

Contextual (When, Where, Why)

The student will use this information throughout the course to enhance his understanding and provide direction for the EMT-Basic's relationship to the individual components of the EMS system. The lesson will provide the student with a road map for learning the skill and knowledge domains of the EMT-Basic. Additionally, this lesson will identify that not all students meet the mental and physical requirements of the career field. After completion of the course, the EMT-Basic will use this information to understand the process of gaining and maintaining certification, as well as understanding state and local legislation affecting the profession. This lesson sets the foundation for the remaining teaching/learning process. A positive, helpful attitude

presented by the instructor is *essential* to assuring a positive, helpful attitude from the student.

STUDENT ACTIVITY

Auditory (Hear)

1. Students will hear specifically what they can expect to receive from the training program.
2. Students will hear the specific expectations of the training program.
3. Students will hear actual state and local legislation relative to EMS practice and certification.

Visual (See)

1. Students will see audio-visual aids or materials explaining the components of the health care system, EMT-Basic level of care, EMT-Basic's roles and responsibilities, professional attributes, and certification requirements.
2. Students will receive a copy of the cognitive, affective and psychomotor objectives for the entire curriculum.
3. Students will receive the final skill evaluation instruments.

Kinesthetic (Do)

1. Students will practice situations in which EMT-Basics portray professional attributes and experience ethical dilemmas.
2. Students will complete the necessary course paperwork.
3. Students will indicate if they will require/request assistance during the course or certification process based on the Americans with Disabilities Act. Additionally, students will provide the necessary documentation to support the requirements/request.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation form).

Evaluation

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-2
Well-Being of the EMT-Basic

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level
2 = Application level
3 = Problem-solving level

Cognitive Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-2.1 List possible emotional reactions that the EMT-Basic may experience when faced with trauma, illness, death and dying. (C-1)

1-2.2 Discuss the possible reactions that a family member may exhibit when confronted with death and dying.(C-1)

1-2.3 State the steps in the EMT-Basic's approach to the family confronted with death and dying.(C-1)

1-2.4 State the simplified definition of stress

1-2.5 State the possible reactions that the family of the EMT-Basic may exhibit due to the EMTs involvement in EMS.(C-1)

1-2.6 State six general causes of stress.

1-2.7 Recognize the signs and symptoms of stressors associated with EMS. (C-1)

1-2.8 Recognize the effects of stress on the human body.

1-2.9 Identify behavior which is stress prone and specific job stressors.

1-2.10 State possible steps that the EMT-Basic may take to help reduce/alleviate stress.(C-1)

1-2.11 State three quick stress stoppers.

1-2.12 Describe the elements of critical incident stress management.(C-1)

1-2.13 Explain the need to determine scene safety.(C-2)

1-2.14 Discuss the importance of body substance isolation (BSI).(C-1)

1-2.15 Describe the steps the EMT-Basic should take for personal protection from airborne and bloodborne pathogens.(C-1)

1-2.16 List the personal protective equipment necessary for each of the following situations:(C-1)

- Hazardous materials
- Rescue operations
- Violent scenes
- Crime scenes
- Exposure to bloodborne pathogens
- Exposure to airborne pathogens

Affective Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-2.17 Explain the rationale for serving as an advocate for the use of appropriate protective equipment.(A-3)

Psychomotor Objective

1-2.18 Given a scenario with potential infectious exposure, the EMT-Basic will use appropriate personal protective equipment. At the completion of the scenario, the EMT-Basic will properly remove and discard the protective garments.(P-1,2)

1-2.19 Given the above scenario, the EMT-Basic will complete disinfection/cleaning and all reporting documentation.(P-1,2)

Preparation

Motivation: EMT-Basics encounter many stressful situations providing emergency medical care to patients. These range from death and terminal illness to major traumatic situations and child abuse. EMT-Basics will treat angry, scared, violent, seriously injured and ill patients and family members. The EMT-Basic is not immune from the personal effects of these situations. EMT-Basics will learn during this lesson what to expect and how to assist the patient, patient's family, the EMT-Basic's family and other EMT-Basics in dealing with the stress. This lesson discusses methods of talking to friends and family, without violating confidentiality, but as a means of helping them cope with involvement in EMS. Finally, aspects of personal safety will be discussed. It is important to realize this is only a brief overview and will be readdressed with each specific skill or topic. To put this in perspective, remember: A dead or injured EMT-Basic is of little or no use to a patient.

Prerequisites: None

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the well-being of the EMT-Basic. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be selected to assure the objectives of the curriculum are met.

Resource Materials: Instructor's	NYS DOH - "Stress Management" - Addendum to the Lesson Plan for Emergency Medical Technician
EMS Equipment:	Eye protection, gowns, gloves, masks, forms for reporting exposures.

PERSONNEL

Primary Instructor:	One EMT-Basic instructor knowledgeable in critical incident stress debriefing, identifying child/elderly abuse, stages of death and dying, and aspects of scene safety.
Assistant Instructor:	None required.
Recommended Minimum Time to Complete:	Two hours

Presentation

Declarative (What)

I. Emotional Aspects of Emergency Care
   A. Death and dying
      1. Stages
         a. Denial ("Not me.") - defense mechanism creating a buffer between shock of dying and dealing with the illness/injury.
         b. Anger ("Why me.")
            (1) EMT-Basics may be the target of the anger.
            (2) Don't take anger or insults personally.
               (a) Be tolerant.
               (b) Do not become defensive.
            (3) Employ good listening and communication skills.
            (4) Be empathetic.
         c. Bargaining ("OK, but first let me...") - agreement that, in the patient's mind, will postpone the death for a short time.
         d. Depression ("OK, but I haven't...")
            (1) Characterized by sadness and despair.
            (2) Patient is usually silent and retreats into his own world.
         e. Acceptance ("OK, I am not afraid.")
            (1) Does not mean the patient will be happy about dying.
            (2) The family will usually require more support during this stage than the patient.
      2. Dealing with the dying patient and family members
         a. Patient needs include dignity, respect, sharing, communication, privacy and control.
         b. Family members may express rage, anger and despair.
         c. Listen empathetically.
         d. Do not falsely reassure.
         e. Use a gentle tone of voice.
         f. Let the patient know everything that can be done to help will be done.
         g. Use a reassuring touch, if appropriate.
         h. Comfort the family.
      3. Simple Definition of Stress
         a. Any response, physical, emotional or behavioral, we have to the things that happen in our lives, on and off the job.
   B. Stressful situations
      1. Examples of situations that may produce a stress response *on the job*.
         a. Mass casualty situations
         b. Infant and child trauma
         c. Amputations

d. Infant/child/elder/spouse abuse
e. Death/injury of co-worker or other public safety personnel

2. The EMT-Basic will experience personal stress as well as encounter patients and bystanders in severe stress.
3. Causes include:
   a. Boss - defined as any person or group of people who require us to perform, IE. supervisors at work, or family at home.
   b. Deadlines - Time pressure of life events such as holidays, reporting to work on time, income taxes, etc. The deadlines in emergency care are found in the fight against life and death, IE. 4 to 6 minute biological death.
   c. Job - In the work of emergency service once again the stress comes from having to make life or death decisions, working with the dead and dying, recertifying, etc.
   d. Finances - Creating pressure to survive in our expansive world, may require you to work overtime or hold a second job.
   e. Home Life - Stressful relationships, parenting, caring for elderly parents, running the household, etc.
   f. Social Life - Not having a support network or a group of friends to spend time with off the job, or being socially overloaded, not allowing self sufficient quiet time to unwind.

   Note: Stress comes in many ways. Managing stress requires your attention to all aspects of your life.

C. Stress management
   1. Recognize warning signs
      a. Irritability to co-workers, family, friends
      b. Inability to concentrate
      c. Difficulty sleeping/nightmares
      d. Anxiety
      e. Indecisiveness
      f. Guilt
      g. Loss of appetite
      h. Loss of interest in sexual activities
      i. Isolation
      j. Loss of interest in work
   2. Life-style changes
      a. Helpful for "job burnout"
      b. Change diet
         (1) Reduce sugar, caffeine and alcohol intake
         (2) Avoid fatty foods
         (3) Increase carbohydrates
      c. Exercise
      d. Practice relaxation techniques, meditation, visual imagery

3. Balance work, recreation, family, health, etc.
4. EMS personnel and their family's and friends' responses
    a. Lack of understanding
    b. Fear of separation and being ignored
    c. On-call situations cause stress
    d. Can't plan activities
    e. Frustration caused by wanting to share
5. Work environment changes
    a. Request work shifts allowing for more time to relax with family and friends.
    b. Request a rotation of duty assignment to a less busy area.
6. Seek/refer professional help.
7. Comprehensive critical incident stress management includes:
    a. Pre-incident stress education
    b. On-scene peer support
    c. One-on-one support
    d. Disaster support services
    e. Defusing
    f. CISD
    g. Follow up services
    h. Spouse/family support
    i. Community outreach programs
    j. Other health and welfare programs such as wellness programs
8. Tools available to assist in the management of stress.
    The following three (3) tools will begin to assist you in your stress management: (have the group practice the techniques)
    a. Deep Breathing Procedure - This technique is quickly available to assist you in stopping the stress response. At the moment you begin to feel stress, stop and take a deep breath in the following way. Inhale through your nose deeply, hold the breath for three (3) seconds then forcefully exhale through your mouth saying to yourself, “Relax and let go, I am in control.”
    b. Exercise - Exercise is one of the best tools available to break a stress response. When you are feeling the stress of a bad call, or you have had a stressful experience at home, select a physical activity such as walking, jogging, swimming, washing the car or raking the lawn as a way to safely dissipate the energy the stressor has created.
    c. Talk about your worries, fears and concerns. If you experience a powerful event, share your thoughts and concerns with another person. Unload the pain. Remember, “Its OK not to be OK.”
9. Critical incident stress debriefing (CISD)
    a. A team of peer counselors and mental health professionals

who help emergency care workers deal with critical incident stress.

b. Meeting is held within 24 to 72 hours of a major incident.
   (1) Open discussion of feelings, fears, and reactions
   (2) Not an investigation or interrogation
   (3) All information is confidential
   (4) CISD leaders and mental health personnel evaluate the information and offer suggestions on overcoming the stress.

c. Designed to accelerate the normal recovery process after experiencing a critical incident.
   (1) Works well because feelings are ventilated quickly.
   (2) Debriefing environment is non-threatening.

d. How to access local CISD system.

II. Scene Safety

A. Body substance isolation (BSI) (Bio-Hazard)

1. EMT-Basic's and patient's safety

a. Hand washing

b. Eye protection
   (1) If prescription eyeglasses are worn, then removable side shields can be applied to them.
   (2) Goggles are NOT required.

c. Gloves (vinyl or latex)
   (1) Needed for contact with blood or bloody body fluids.
   (2) Should be changed between contact with different patients.

d. Gloves (utility) - needed for cleaning vehicles and equipment

e. Gowns
   (1) Needed for large splash situations such as with field delivery and major trauma.
   (2) Change of uniform is preferred.

f. Masks
   (1) Surgical type for possible blood splatter (worn by care provider)
   (2) High Efficiency Particulate Air (HEPA) respirator if patient suspected of or diagnosed with tuberculosis (worn by care provider)
   (3) Airborne disease - surgical type mask (worn by patient)

g. Requirements and availability of specialty training

2. OSHA/state regulations regarding BSI

3. Statutes/regulations reviewing notification and testing in an exposure incident

B. Personal protection

1. Hazardous materials
    a. Identify possible hazards
        (1) Binoculars
        (2) Placards
        (3) *Hazardous Materials, The Emergency Response Handbook*, published by the United States Department of Transportation
    b. Protective clothing
        (1) Hazardous material suits
        (2) Self Contained Breathing Apparatus
    c. Hazardous materials scenes are controlled by specialized Haz-Mat teams.
    d. EMT-Basics provide emergency care only after the scene is safe and patient contamination limited.
    e. Requirements and availability of specialized training
2. Rescue
    a. Identify and reduce potential life threats.
        (1) Electricity
        (2) Fire
        (3) Explosion
        (4) Hazardous materials
    b. Protective clothing
        (1) Turnout gear
        (2) Puncture-proof gloves
        (3) Helmet
        (4) Eye wear
    c. Dispatch rescue teams for extensive/heavy rescue.
3. Violence
    a. Scene should always be controlled by law enforcement before EMT-Basic provides patient care.
        (1) Perpetrator of the crime
        (2) Bystanders
        (3) Family members
    b. Behavior at crime scene (covered in greater detail in Medical/Legal and Ethical Issues, Module 1, Lesson 1-3).
        (1) Do not disturb the scene unless required for medical care.
        (2) Maintain chain of evidence.

III. Safety Precautions in Advance - Suggested Immunizations
    A. Tetanus prophylaxis
    B. Hepatitis B vaccine
    C. Verification of immune status with respect to commonly transmitted contagious diseases
    D. Access or availability of immunizations in the community
    E. Tuberculin purified protein derivative (PPD) testing

F. Others

IV. Practical Considerations
A. The EMT-Basic will be given information on how to access additional information on hazardous materials and infectious disease exposure, notification and follow-up.

Suggested Application

Contextual (When, Where, Why)

1. The EMT-Basic will use the aspects of scene safety and personal protection every day and on every emergency run.
2. While the EMT-Basic may not be a member of a hazardous material or heavy rescue team, this lesson should provide the personal incentive to seek out and attend continuing education programs relative to personal safety during hazardous material incidents, rescue situations and violent crime scenes.
3. If the EMT-Basic fails to develop personal safety skills, his EMT-Basic career may come to a premature end through serious injury or death.
4. The well-being of the EMT-Basic depends upon his ability to recognize that stressful traumatic situations do occur and the effect of those situations is felt by the patient, family members and the EMT-Basic. In recognizing this, the EMT-Basic must be aware of internal and external mechanisms to help himself, the patient, patient's families, EMT-Basic's family and other EMT-Basics deal with reactions to stress.
5. The EMT-Basic will use proper communication techniques when dealing with the grieving process.

STUDENT ACTIVITIES

Auditory (Hear)

1. The student will hear the instructor demonstrate methods of communicating with patients and family members of terminally ill patients.
2. The student will hear the instructor demonstrate methods of communicating with friends and family members of a dead or dying patient.

Visual (See)

1. The student will see various audio-visual aids or materials of scenes requiring personal protection.
2. The student will see various audio-visual aids or materials of personal protection clothing worn by hazardous material/rescue teams.
3. The student will see the gown, gloves, mask and eye protection associated with body substance isolation (BSI).

Kinesthetic (Do)

1. The student will practice role play, talking to patients in various

stressful/traumatic situations.

2. The student will practice putting on and removing gowns, gloves and eye protection gear.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content. (complete remediation form)

Evaluation

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-3
Medical / Legal and Ethical Issues

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level
2 = Application level
3 = Problem-solving level

Cognitive Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-3.1 Define the EMT-Basic scope of practice.(C-1)
1-3.2 Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application.(C-1)
1-3.3 Define consent and discuss the methods of obtaining consent.(C-1)
1-3.4 Differentiate between informed and implied consent.(C-3)
1-3.5 Explain the role of consent of minors, emancipated minors and mentally incompetent adults in providing care.(C-1)
1-3.6 Discuss the implications for the EMT-Basic of patient refusal of transport and/or treatment.(C-1)
1-3.7 Define abandonment, negligence, and battery, as they relate to the EMT-Basic.(C-1)
1-3.8 State the conditions necessary for the EMT-Basic to have a duty to act.
1-3.9 Explain the importance, necessity and legality of patient confidentiality.
1-3.10 Discuss the considerations of the EMT-Basic in issues of organ retrieval.(C-1)
1-3.11 Discuss the role that an EMT-Basic should take to assist in the preservation of a crime scene.(C-3)
1-3.12 State the conditions that require an EMT-Basic to notify local law enforcement officials.(C-1)

Affective Objectives

At the completion of this lesson, the EMT-Basic student will be able to:

1-3.13 Discuss the ethical responsibilities of the EMT-B.
1-3.14 Explain the role of EMS and the EMT-Basic regarding patients with DNR orders.
1-3.15 Explain the rationale for the needs, benefits and usage of advance directives.

Psychomotor Objectives
No psychomotor objectives identified.

Preparation

Motivation: Medical/legal and ethical issues are a vital element of the EMT-Basic's daily life. Should an EMT-Basic stop and treat an automobile crash victim when off duty? Should patient information be released to the attorney on the telephone? Can a child with a broken arm be treated even though his parents are not at home and/or only his child care provider is around? These and many other medical/legal/ethical questions face the EMT-Basic every day. Guidance will be given in this lesson to answer these questions and learn how to make the correct decision when other medical/legal and ethical questions arise.

Prerequisites: None

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to medical/ legal and ethical issues. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: None.

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in the medical/legal aspects and ethical issues that the EMT-Basic will encounter.

Assistant Instructor: None required.

Recommended Minimum Time to Complete: One and a half hours

Presentation

Declarative (What)

I. Scope of Practice
   A. Legal duties of the EMT-B.
      1. Providing patient care within the EMT-Basic scope of practice
      2. Defined by state legislation and regulations
         a. Further defined by medical direction through the use of protocols and standing orders
      3. Scope of practice of an EMT-Basic may be contingent upon medical direction by:
         a. Telephone/radio communications
         b. Approved standing orders/protocols
   B. Ethical responsibilities
      1. Make the physical/emotional needs of the patient a priority.
      2. Practice/maintenance of skills to the point of mastery.
      3. Attend continuing education/refresher programs.
      4. Critically review performances, seeking ways to improve response time, patient outcome, communication.
      5. Honesty in reporting
      6. Maintain patient confidentiality

II. Advance Directives
   A. Do Not Resuscitate (DNR) orders
      1. Patient has the right to refuse resuscitative efforts.
      2. Requires written order from physician on NYS DOH Form.
      3. Review state and local legislation/protocols relative to DNR orders and advance directives.
         a. Prehospital DNRs honored
         b. Health Care Proxy not honored
      4. Refer to current NYS DOH memo.
         a. Good Faith efforts
         b. Defined by state legislation

III. Consent
   A. Informed
      1. Patient must be of legal age and able to make a rational decision.
      2. Patient must be informed of the steps of the procedures and all related risks.
      3. Must be obtained from every conscious, mentally competent adult before rendering treatment.
   B. Implied
      1. Consent assumed from the unconscious patient requiring emergency intervention

2. Based on the assumption that the unconscious patient would consent to life saving interventions

C. Children and mentally incompetent adults
   1. Consent for treatment must be obtained from the parent or legal guardian.
      a. Emancipation issues
      b. State regulations regarding age of minors
   2. When emergency situations exist and the parent or legal guardian is not available for consent, emergency treatment should be rendered based on implied consent.

IV. Refusals
   A. The patient has the right to refuse treatment.
   B. The patient may withdraw from treatment at any time. Example: an unconscious patient regains consciousness and refuses transport to the hospital.
   C. Refusals must be made by mentally competent adults following the rules of informed consent.
   D. The patient must be informed of and fully understand all the risks and consequences associated with refusal of treatment/transport, and must sign a "release from liability" form.
   E. When in doubt, err in favor of providing care.
   F. Documentation is a key factor to protect EMT-Basic in refusal.
      1. Competent adult patients have the right to refuse treatment.
      2. Before the EMT-Basic leaves the scene, he should:
         a. Try again to persuade the patient to go to a hospital.
         b. Ensure the patient is able to make a rational, informed decision, e.g., not under the influence of alcohol or other drugs, or illness/injury effects.
         c. Inform the patient why he should go and what may happen to him if he does not.
         d. Consult medical direction as directed by local protocol.
         e. Consider assistance of law enforcement.
         f. Document any assessment findings and emergency medical care given, and if the patient still refuses, then have the patient sign a refusal form.
         g. The EMT-Basic should never make an independent decision not to transport.

V. Assault
   A. Unlawfully touching a patient without his consent
   B. Providing emergency care when the patient does not consent to the treatment

VI. Abandonment - termination of care of the patient without assuring the continuation of care at the same level or higher.

VII. Negligence - deviation from the accepted standard of care resulting in further injury to the patient. Components:
- A. Duty to act
- B. Breach of the duty
- C. Injury/damages were inflicted
  - 1. Physical
  - 2. Psychological
- D. The actions of the EMT-Basic caused the injury/damage.

VIII. Duty to Act
- A. A contractual or legal obligation must exist.
  - 1. Implied
    - a. Patient calls for an ambulance and the dispatcher confirms that an ambulance will be sent.
    - b. Treatment is begun on a patient.
  - 2. Formal - ambulance service has a written contract with a municipality. Specific clauses within the contract should indicate when service can be refused to a patient.
- B. Legal duty to act. May be moral/ethical/contractual considerations in nature.
  - 1. There are no NYS laws regarding duty to act.

IX. Confidentiality
- A. Confidential information
  - 1. Patient history gained through interview
  - 2. Assessment findings
  - 3. Treatment rendered
- B. Releasing confidential information
  - 1. Requires a written release form signed by the patient. Do not release on request, written or verbal, unless legal guardianship has been established.
  - 2. When a release is not required
    - a. Other health care providers need to know information to continue care.
    - b. Third party payment billing forms
    - c. Legal subpoena
    - d. Statewide data collection system - PCR's

X. Special Situations
- A. Donor/organ harvesting consideration
  - 1. Requires a signed legal permission document
    - a. Separate donor card
    - b. Intent to be a donor on the reverse of patient's driver's license
  - 2. A potential organ donor should not be treated differently from any

other patient.

B. Medical identification insignia
   1. Bracelet, necklace, card
   2. Indicates a serious medical condition of the patient
      a. Allergies
      b. Diabetes
      c. Epilepsy
      d. Others

XI. Potential Crime Scene/Evidence Preservation
   A. Dispatch should notify police personnel.
   B. Actions of the EMT-Basic
      1. Emergency care of the patient is the EMT-Basic's priority.
      2. Do not disturb any item at the scene unless emergency care requires it.
      3. Observe and document anything unusual at the scene.
      4. If possible, do not cut through holes in clothing from gunshot wounds or stabbing.

Suggested Application

Procedural (How)

None identified for this lesson.

Contextual (When, Where, Why)

Medical/legal and ethical issues are present in every aspect of patient care. The decision to treat or not treat a patient, to release or not release information, to report or not report an incident all require a knowledge of current state and local legislation, policy and protocol. Up-to-date knowledge of the current legal interpretation of issues such a negligence, battery, confidentiality, consent and refusal of treatment is essential for the EMT-Basic.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear actual case law and common law decisions relative to EMT-Basic care.

Visual (See)

1. Students should see actual copies of medical identification insignia, organ donor cards, Do Not Resuscitate orders, and information release forms.
2. Students should see audio-visual aids or materials of definitions of medical/legal terms such as negligence, abandonment, battery, duty to act, consent, confidentiality.

Kinesthetic (Do)

1. Students should practice making decisions while role playing the various medical/legal and ethical situations that occur in the EMS environment (including

consent, abandonment, battery, duty to act, negligence, and confidentiality).
2. Students should practice role play situations in which DNR orders are in effect.
3. Students should practice role play situations in which organ donor cards are in effect.
4. Students should practice role playing situations of patients refusing transport.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

Evaluation

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-4
The Human Body

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective
1 = Knowledge level
2 = Application level
3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

1-4.1 Define the following topographic terms: Medial, lateral, proximal, distal, superior, inferior, anterior, posterior, midline, right and left, mid-clavicular, bilateral, mid-axillary.(C-1)

1-4.2 Identify the following topographic terms: Medial, lateral, proximal, distal, superior, inferior, anterior, posterior, midline, right and left, mid-clavicular, bilateral, mid-axillary.(C-1)

1-4.3 Describe the anatomy and function of the following major body systems: Respiratory, circulatory, musculoskeletal, nervous and endocrine.(C-1)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Preparation

Motivation: To perform an adequate patient assessment, the EMT-Basic must be familiar with the normal anatomy of the human body and topographical terminology. This information will provide a solid cornerstone which will enable the EMT-Basic to build the essentials of quality patient assessment and management.

Prerequisites: None

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the human body. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Anatomy models

PERSONNEL

Primary Instructor:	One EMT-Basic instructor knowledgeable in human body systems and topographical terminology.
Assistant Instructor:	None required.
Recommended Minimum Time to Complete:	Two and a half hours

Presentation

Declarative (What)

I. Anatomical Terms
  A. Normal anatomical position
    1. Person standing, facing forward
    2. Palms facing forward
  B. Anatomical terms - planes
    1. Midline
      a. Imaginary line drawn vertically through the middle of the body: Nose --> umbilicus (belly button)
      b. Divides the body into right and left.
    2. Mid-axillary
      a. Imaginary line drawn vertically from the middle of the armpit to the ankle.
      b. Divides the body into anterior and posterior.
  C. Descriptive anatomical terms
    1. Torso
    2. Medial
    3. Lateral
    4. Proximal
    5. Distal
    6. Superior
    7. Inferior
    8. Anterior
    9. Posterior
    10. Right and left
    11. Mid-clavicular
    12. Bilaterally
    13. Dorsal
    14. Ventral
    15. Plantar
    16. Palmar
    17. Prone
    18. Supine
    19. Fowlers
    20. Trendelenburg
    21. Shock position

II. Skeletal System
  A. Function
      a. Gives the body shape
      b. Protects vital internal organs
      c. Provides for body movement
  B. Components
    1. Skull - houses and protects the brain
    2. Face
      a. Orbit

b. Nasal bone
c. Maxilla
d. Mandible (jaw)
e. Zygomatic bones (cheeks)

3. Spinal Column
   a. Cervical (neck) - 7
   b. Thoracic (upper back) - 12
   c. Lumbar (lower back) - 5
   d. Sacral (back wall of the pelvis) - 5
   e. Coccyx (tailbone) - 4
4. Thorax
   a. Ribs
      (1) 12 pair
      (2) Attached posterior to the thoracic vertebrae.
      (3) Pairs 1-10 are attached anterior to the sternum.
      (4) Pairs 11 and 12 are floating.
   b. Sternum (Breastbone)
      (1) Manubrium (superior portion of sternum)
      (2) Body (middle)
      (3) Xiphoid process (inferior portion of sternum)
5. Pelvis
   a. Iliac crest (wings of pelvis)
   b. Pubis (anterior portion of pelvis)
   c. Ischium (inferior portion of pelvis)
6. Lower extremities
   a. Greater trochanter (ball) and acetabulum (socket of hip bone) [Make up the hip joint]
   b. Femur (thigh)
   c. Patella (kneecap)
   d. Tibia (shin - lower leg)
   e. Fibula (lower leg)
   f. Medial and lateral malleolus - are the surface landmarks of the ankle joint.
   g. Tarsals and metatarsal (foot)
   h. Calcaneus (heel)
   i. Phalanges (toes)
7. Upper extremities
   a. Clavicle (collar bone)
   b. Scapula (shoulder blade)
   c. Acromion (tip of shoulder)
   d. Humerus (superior portion of upper extremity)
   e. Olecranon (elbow)
   f. Radius (lateral bone of forearm)
   g. Ulna (medial bone of forearm)
   h. Carpals (wrist)
   i. Metacarpals (hand)

j. Phalanges (fingers)

C. Joints
1. Where bones connect to other bones
2. Types
a. Ball and socket
b. Hinged

III. Body Systems
A. Respiratory System - It provides for the intake of oxygen needed by the body and the release of carbon dioxide and other substances. Main elements are:
1. Nose and Mouth
2. Pharynx
a. Oropharynx
b. Nasopharynx
3. Epiglottis - a leaf-shaped structure that prevents food and liquid from entering the trachea during swallowing.
4. Trachea (windpipe)
5. Cricoid cartilage - firm cartilage ring forming the lower portion of the larynx.
6. Larnyx (voice box)
7. Bronchi - two major branches of the trachea to the lungs. Bronchus subdivides into smaller air passages ending at the alveoli.
8. Alveoli
9. Lungs
10. Diaphragm
a. Inhalation (active)
(1) Diaphragm and intercostal muscles contract, increasing the size of the thoracic cavity.
(a) Diaphragm moves slightly downward, flares lower portion of rib cage.
(b) Ribs move upward/outward.
(2) Air flows into the lungs.
b. Exhalation
(1) Diaphragm and intercostal muscles relax decreasing the size of the thoracic cavity.
(a) Diaphragm moves upward.
(b) Ribs move downward/inward.
(2) Air flows out of the lungs.
11. Respiratory physiology
a. Alveolar/capillary exchange
(1) Oxygen-rich air enters the alveoli during each inspiration.
(2) Oxygen-poor blood in the capillaries passes through the alveoli.
(3) Oxygen enters the capillaries as carbon dioxide

enters the alveoli.

b. Capillary/cellular exchange
   (1) Cells give up carbon dioxide to the capillaries.
   (2) Capillaries give up oxygen to the cells.

c. Adequate breathing
   (1) Normal rate
      (a) Adult - 12-20/minute
      (b) Child - 15-30/minute
      (c) Infant - 25-50/minute
   (2) Rhythm
      (a) Regular
      (b) Irregular
   (3) Quality
      (a) Breath sounds - present and equal
      (b) Chest expansion - adequate and equal
      (c) Effort of breathing - use of accessory muscles - predominantly in infants and children
   (4) Depth (tidal volume) - adequate

d. Inadequate breathing
   (1) Rate - outside of normal ranges.
   (2) Rhythm - irregular
   (3) Quality
      (a) Breath sounds - diminished or absent
      (b) Chest expansion - unequal or inadequate
      (c) Increased effort of breathing - use of accessory muscles - predominantly in infants and children
   (4) Depth (tidal volume) - inadequate/shallow
   (5) The skin may be pale or cyanotic (blue) and cool and clammy.
   (6) There may be retractions above the clavicles, between the ribs and below the rib cage, especially in children.
   (7) Nasal flaring may be present, especially in children.
   (8) In infants, there may be "seesaw" breathing where the abdomen and chest move in opposite directions.
   (9) Agonal respirations (occasional gasping breaths) may be seen just before death.

12. Infant and child anatomy considerations
   a. Mouth and nose - in general: All structures are smaller and more easily obstructed than in adults.
   b. Pharynx - infant’s and children's tongues take up proportionally more space in the mouth than adults.
   c. Trachea (windpipe)
      (1) Infants and children have narrower tracheas that are obstructed more easily by swelling.

(2) The trachea is softer and more flexible in infants and children.

d. Cricoid cartilage - like other cartilage in the infant and child, the cricoid cartilage is less developed and less rigid.

e. Diaphragm - chest wall is softer, infants and children tend to depend more heavily on the diaphragm for breathing.

B. Circulatory (Cardiovascular) System - The circulatory system consists of the heart (a pump) and a system of arteries which transport blood containing oxygen to all body systems, capillaries through whose thin walls oxygen and other products are exchanged with body cells, and veins which transport blood containing waste products from body cells to be eliminated.

1. Heart

a. Structure/function

(1) Atrium

(a) Right - receives blood from the veins of the body and the heart, pumps oxygen-poor blood to the right ventricle.

(b) Left - receives blood from the pulmonary veins (lungs), pumps oxygen-rich blood to left ventricle.

(2) Ventricle

(a) Right - pumps blood to the lungs.

(b) Left - pumps blood to the body.

(3) Valves prevent backflow of blood.

b. Cardiac conductive system

(1) Heart is more than a muscle.

(2) Specialized contractile and conductive tissue in the heart

(3) Electrical impulses

2. Arteries

a. Function - carry blood from left ventricle to rest of body and heart muscle.

b. Major arteries

(1) Coronary arteries - vessels that supply the heart with oxygenated blood.

(2) Aorta

(a) Major artery originating from the heart, lying in front of the spine in the thoracic and abdominal cavities.

(b) Divides at the level of the navel into the iliac arteries.

(3) Pulmonary

(a) Artery originating at the right ventricle.

(b) Carries oxygen-poor blood to the lungs.

(4) Carotid

(a) Major artery of the neck.
(b) Supplies the head with blood.
(c) Pulsations can be palpated on either side of the neck.

(5) Femoral
(a) The major artery of the thigh.
(b) Supplies the lower extremities with blood.
(c) Pulsations can be palpated in the groin area (the crease between the abdomen and thigh).

(6) Radial
(a) Major artery of the wrist.
(b) Pulsations can be palpated at the thumbside of the wrist.

(7) Brachial
(a) A major artery of the upper arm.
(b) Pulsations can be palpated on the inside of the arm between the elbow and the shoulder.
i) Antecubital fossa - the anterior aspect of the elbow over the brachial artery
(c) Used when determining a blood pressure (BP) using a BP cuff (sphygmomanometer) and a stethoscope.

(8) Posterior tibial - pulsations can be palpated on the posterior surface of the medial malleolus.

(9) Dorsalis pedis
(a) An artery in the foot
(b) Pulsations can be palpated on the anterior surface of the foot.

3. Arteriole - the smallest branch of an artery leading to the capillaries.
4. Capillaries
a. Tiny blood vessels that connect arterioles to venules
b. Found in all parts of the body
c. Allow for the exchange of nutrients and waste at the cellular level
5. Venule - the smallest branch of a vein leading from the capillaries.
6. Veins
a. Function - vessels that carry blood back to the heart.
b. Major veins
(1) Pulmonary vein - carries oxygen-rich blood from the lungs to the left atrium.
(2) Venae cavae
(a) Superior
(b) Inferior
(c) Carries oxygen-poor blood back to the right atrium.

(3) Jugular veins

7. Blood composition
   a. Red blood cells
      (1) Give the blood its color.
      (2) Carry oxygen.
      (3) Carry carbon dioxide.
   b. White blood cells - part of the body's defense against infections.
   c. Plasma - fluid that carries the blood cells and nutrients.
   d. Platelets - essential for the formation of blood clots.
8. Physiology
   a. Pulse
      (1) Left ventricle contracts sending a wave of blood through the arteries.
      (2) Can be palpated anywhere an artery simultaneously passes near the skin surface and over a bone.
      (3) Peripheral
         (a) Radial
         (b) Brachial
         (c) Posterior tibial
         (d) Dorsalis pedis
      (4) Central
         (a) Carotid
         (b) Femoral
   b. Blood Pressure
      (1) Systolic - the pressure exerted against the walls of the artery when the left ventricle contracts.
      (2) Diastolic - the pressure exerted against the walls of the artery when the left ventricle is at rest.
9. Perfusion
   a. Definition - circulation of blood through an organ or a structure delivering oxygen and other nutrients to the cells of all organ systems and the removal of waste products.
   b. Hypoperfusion is the inadequate circulation of blood through an organ or a structure.
10. Inadequate circulation - Shock (Hypoperfusion): A state of profound depression of the vital processes of the body, characterized by signs and symptoms such as: Pale, cyanotic (blue-gray color), cool, clammy skin, rapid, weak pulse, rapid and shallow breathing, restlessness, anxiety or mental dullness, nausea and vomiting, reduction in total blood volume, low or decreasing blood pressure and subnormal temperature.

C. Musculoskeletal System

The muscular system function
   a. Gives the body shape.
   b. Protects internal organs.

c. Provides for movement.

1. Types
   a. Voluntary (skeletal)
      (1) Attached to the bones.
      (2) Form the major muscle mass of the body.
      (3) Under control of the nervous system and brain. Can be contracted and relaxed by the will of the individual.
      (4) Responsible for movement.
   b. Involuntary (smooth)
      (1) Found in the walls of the tubular structures of the gastrointestinal tract and urinary system, as well as the blood vessels and bronchi.
      (2) Control the flow through these structures.
      (3) Carry out the automatic muscular functions of the body.
      (4) Individuals have no direct control over these muscles.
      (5) Respond to stimuli such as stretching, heat, and cold.
   c. Cardiac
      (1) Found only in the heart.
      (2) Involuntary muscle - has its own supply of blood through the coronary artery system.
      (3) Can tolerate interruption of blood supply for only very short periods.
      (4) Automaticity - the ability of the muscle to contract on its own.

D. Nervous system
   1. Function - controls the voluntary and involuntary activity of the body.
   2. Components
      a. Central nervous system
         (1) Brain - located within the cranium.
         (2) Spinal cord - located within the spinal column from the brain through the lumbar vertebrae.
      b. Peripheral nervous system
         (1) Sensory - carry information from the body to the brain and spinal cord.
         (2) Motor - carry information from the brain and spinal cord to the body.

E. Skin
   1. Function
      a. Protects the body from the environment, bacteria and other organisms.
      b. Helps regulate the temperature of the body.
      c. Senses heat, cold, touch, pressure and pain; transmits this information to the brain and spinal cord.
   2. Layers

a. Epidermis - outermost layer of skin.
b. Dermis - deeper layer of skin containing sweat and sebaceous glands, hair follicles, blood vessels and nerve endings.
c. Subcutaneous layer

F. Endocrine system function - secretes chemicals, such as insulin and adrenalin, responsible for regulating body activities and functions.

Suggested Application

Procedural (How)

None identified for this lesson.

Contextual (When, Where, Why)

It is of utmost importance that the EMT-Basic have a very basic level of knowledge concerning the human body. To accurately communicate (both verbally and through written reports) to other health professionals, the EMT-Basic must be able to identify topographic anatomy.

The EMT-Basic must also understand the basic components of the body systems. Knowledge obtained in this lesson will be extremely beneficial in other modules throughout this curriculum.

STUDENT ACTIVITY

Auditory (Hear)

None identified for this lesson.

Visual (See)

1. The students should see models of the human body.
2. The students should see diagrams of the human body.
3. The students should see a skeleton of the human body.

Kinesthetic (Do)

1. The students should practice identifying various structures of the human body.
2. The students should practice demonstrating their ability to identify topographic anatomy.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

Evaluation

Written:	Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.
Practical:	Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-5
Baseline Vitals Signs and SAMPLE History

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

1-5.1 Identify the components of vital signs.(C-1)
1-5.2 Describe the methods to obtain a breathing rate.(C-1)
1-5.3 Identify the attributes that should be obtained when assessing breathing.(C-1)
1-5.4 Differentiate between shallow, labored and noisy breathing.(C-3)
1-5.5 Describe the methods to obtain a pulse rate.(C-1)
1-5.6 Identify the information obtained when assessing a patient's pulse.(C-1)
1-5.7 Differentiate between a strong, weak, regular and irregular pulse.(C-3)
1-5.8 Describe the methods to assess the skin color, temperature, condition (capillary refill in infants and children).(C-1)
1-5.9 Identify the normal and abnormal skin colors.(C-1)
1-5.10 Differentiate between pale, blue, red and yellow skin color.(C-3)
1-5.11 Identify the normal and abnormal skin temperature.(C-1)
1-5.12 Differentiate between hot, cool and cold skin temperatures.(C-3)
1-5.13 Identify normal and abnormal skin conditions.(C-1)
1-5.14 Identify normal and abnormal capillary refill in infants and children.(C-1)
1-5.15 Describe the methods to assess the pupils.(C-1)
1-5.16 Identify normal and abnormal pupil sizes.(C-1)
1-5.17 Differentiate between dilated (big) and constricted (small) pupil size.(C-3)
1-5.18 Differentiate between reactive and non-reactive pupils and equal and unequal pupils.(C-3)
1-5.19 Describe the methods to assess blood pressure.(C-1)
1-5.20 Define systolic pressure.(C-1)
1-5.21 Define diastolic pressure.(C-1)
1-5.22 Explain the difference between auscultation and palpation for obtaining a blood pressure.(C-1)
1-5.23 Identify the components of the SAMPLE history.(C-1)
1-5.24 Differentiate between a sign and a symptom.(C-3)
1-5.25 State the importance of accurately reporting and recording the baseline vital signs.(C-1)
1-5.26 Discuss the need to search for additional medical identification.(C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

1-5.27 Explain the value of performing the baseline vital signs.(A-2)

1-5.28 Recognize and respond to the feelings patients experience during assessment.(A-1)
1-5.29 Defend the need for obtaining and recording an accurate set of vital signs.(A-3)
1-5.30 Explain the rationale of recording additional sets of vital signs.(A-1)
1-5.31 Explain the importance of obtaining a SAMPLE history.(A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:
1-5.32 Demonstrate the skills involved in assessment of breathing.(P-1,2)
1-5.33 Demonstrate the skills associated with obtaining a pulse.(P-1,2)
1-5.34 Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children.(P-1,2)
1-5.35 Demonstrate the skills associated with assessing the pupils.(P-1,2)
1-5.36 Demonstrate the skills associated with obtaining blood pressure.(P-1,2)
1-5.37 Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene.(P-1,2)

Preparation

Motivation: An EMT-Basic must be able to accurately assess and record a patient's vital signs. This must be done to record trends in the patient's condition. In addition to vital signs, obtain a SAMPLE history in the event that the patient loses consciousness.

Prerequisite Skills: None

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to vital signs and SAMPLE history. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, infant and child)(1:6), penlights (1:6), Watch with second hand, Prehospital Care Reports (PCRs)

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant

	instructors should be knowledgeable in assessing baseline vital signs and SAMPLE histories.
Recommended Minimum Time to Complete:	Two hours

Presentation

Declarative (What)

I. General Information
   A. Chief complaint - why EMS was notified
   B. Age - years, months, days
   C. Sex - male or female
   D. Race

II. Baseline Vital Signs
   A. Breathing - assessed by observing the patient's chest rise and fall.
      1. Rate is determined by counting the number of breaths in a 30-second period and multiplying by 2. Care should be taken not to inform the patient, to avoid influencing the rate.
      2. Quality of breathing can be determined while assessing the rate. Quality can be placed in 1 of 4 categories:
         a. Normal - average chest wall motion, not using accessory muscles.
         b. Shallow - slight chest or abdominal wall motion.
         c. Labored
            (1) An increase in the effort of breathing
            (2) Grunting and stridor
            (3) Often characterized by the use of accessory muscles
            (4) Nasal flaring, supraclavicular and intercostal retractions in infants and children
            (5) Sometimes gasping
         d. Noisy - an increase in the audible sound of breathing. May include snoring, wheezing, gurgling, crowing.
   B. Pulse
      1. Initially a radial pulse should be assessed in all patients one year or older. In patients less than one year of age a brachial pulse should be assessed.
      2. If the pulse is present, assess rate and quality.
         a. Rate is the number of beats felt in 30 seconds multiplied by 2.
         b. Quality of the pulse can be characterized as:
            (1) Strong
            (2) Weak
            (3) Regular
            (4) Irregular
      3. If peripheral pulse is not palpable, assess carotid pulse.
         a. Use caution. Avoid excess pressure on geriatrics.
         b. Never attempt to assess carotid pulse on both sides at one time.
   C. Assess skin to determine perfusion.
      1. The patient's color should be assessed in the nail beds, oral mucosa, and conjunctiva.
         a. In infants and children, palms of hands and soles of feet

should be assessed.
b. Normal skin - pink
c. Abnormal skin colors
(1) Pale - indicating poor perfusion (impaired blood flow)
(2) Cyanotic (blue-gray) - indicating inadequate oxygenation or poor perfusion
(3) Flushed (red) - indicating exposure to heat or carbon monoxide poisoning.
(4) Jaundice (yellow) - indicating liver abnormalities

2. The patient's temperature should be assessed by placing the back of your hand on the patient's skin.
a. Normal - warm
b. Abnormal skin temperatures
(1) Hot - indicating fever or an exposure to heat.
(2) Cool - indicating poor perfusion or exposure to cold.
(3) Cold - indicates extreme exposure to cold.

3. Assess the condition of the patient's skin.
a. Normal - dry
b. Abnormal - skin is wet, moist, or dry.

4. Assess capillary refill in infants and children less than six years of age.
a. Capillary refill in infants and children is assessed by pressing on the patient's skin or nail beds and determining time for return to initial color.
b. Normal capillary refill in infants and children is < 2 seconds.
c. Abnormal capillary refill in infants and children is > 2 seconds.

D. Pupils are assessed by briefly shining a light into the patient's eyes, and determining size and reactivity.
1. Dilated (very big), normal, or constricted (small).
2. Equal or unequal
3. Reactivity is whether or not the pupils change in response to the light.
a. Reactive - change when exposed to light
b. Non-reactive - do not change when exposed to light
c. Equally or unequally reactive

E. Blood pressure
1. Assess systolic and diastolic pressures.
a. Systolic blood pressure is the first distinct sound of blood flowing through the artery as the pressure in the blood pressure cuff is released. This is a measurement of the pressure exerted against the walls of the arteries during contraction of the heart.
b. Diastolic blood pressure is the point during deflation of the blood pressure cuff at which sounds of the pulse beat disappear. It represents the pressure exerted against the

walls of the arteries while the left ventricle is at rest.

c. There are two methods of obtaining blood pressure.

(1) Auscultation: In this case the EMT-Basic will listen for the systolic and diastolic sounds.

(2) Palpation: In certain situations, the systolic blood pressure may be measured by feeling for return of pulse with deflation of the cuff.

2. Blood pressure should be measured in all patients older than 3 years of age.

3. The general assessment of the infant or child patient, such as sick appearing, in respiratory distress, or unresponsive, is more valuable than vital sign numbers.

F. Vital sign reassessment

1. Vital signs should be assessed and recorded every 15 minutes at a minimum in a stable patient.

2. Vital signs should be assessed and recorded every 5 minutes in the unstable patient.

3. Vital signs should be assessed following all medical interventions.

III. Obtain an SAMPLE history

SAMPLE is a mnemonic device to help you remember what types of questions the patient should be asked at a minimum.

A. **S**igns/Symptoms

1. Sign - any medical or trauma condition displayed by the patient and identifiable by the EMT-Basic, e.g., Hearing = respiratory distress, Seeing = bleeding, Feeling = skin temperature.

2. Symptom - any condition described by the patient, e.g., shortness of breath.

B. **A**llergies

1. Medications
2. Food
3. Environmental allergies
4. Consider medical identification tag

C. **M**edications

1. Prescription
   a. Current
   b. Recent
   c. Birth control pills
2. Non-prescription
   a. Current
   b. Recent
3. Consider medical identification tag

D. **P**ertinent Past History

1. Medical
2. Surgical
3. Trauma

4. Consider medical identification tag

E. **L**ast oral intake: Solid or liquid
   1. Time
   2. Quantity

F. **E**vents leading to the injury or illness
   1. Chest pain with exertion
   2. Chest pain while at rest

Suggested Application

Procedural (How)

1. Demonstrate the skill of assessing breathing.
2. Demonstrate the skill of determining a pulse.
3. Demonstrate the skill of determining skin color, temperature, condition.
4. Demonstrate the skill of determining capillary refill in infants and children.
5. Demonstrate the skill of assessing pupils for size, reactivity and equality.
6. Demonstrate the skill of assessing blood pressure
   a. Auscultation
   b. Palpation
7. Demonstrate questioning techniques to obtain history.

Contextual (When, Where, Why)

Accurate measurement and recording of vital signs over a period of time may indicate a trend in the patient's condition and be valuable in the continuum of care. There are a number of interventions that the EMT-Basic can perform; however, these skills cannot be performed without an accurate set of baseline vital signs. The SAMPLE history is important to guide the pace of the EMT-Basic and assist in the continuum of care at the receiving facility.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear normal and abnormal breathing.
2. Student should hear with a stethoscope and assess systolic and diastolic pressures.
3. Student should hear 6 components of the SAMPLE history.

Visual (See)

1. Students should see a simulated or actual patient's chest rise and fall and assess rate and quality of breathing.
2. Students should see appropriate areas of the body to assess the color and condition (and in infants and children < 6 years of age, the capillary refill).
3. Students should see pupils to assess size, reactivity and equality.

Kinesthetic (Do)

1. Students should practice methods for assessing breathing.
2. Students should practice methods for obtaining a pulse.

3. Students should practice methods for determining skin color, temperature, condition, (and capillary refill in infants and children < 6 years of age).
4. Students should practice methods for determining pupil size, reactivity and equality.
5. Students should practice methods for determining blood pressure by auscultation and palpation.
6. Students should practice methods for obtaining a SAMPLE history.
7. Students should practice completing a prehospital care report including vital signs and SAMPLE history.

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

Evaluation

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-6
Lifting and Moving Patients

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level
2 = Application level
3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

1-6.1 Define body mechanics.(C-1)

1-6.2 Discuss the guidelines and safety precautions that need to be followed when lifting a patient.(C-1)

1-6.3 Describe the safe lifting of cots and stretchers.(C-1)

1-6.4 Describe the guidelines and safety precautions for carrying patients and/or equipment.(C-1)

1-6.5 Discuss one-handed carrying techniques.(C-1)

1-6.6 Describe correct and safe carrying procedures on stairs.(C-1)

1-6.7 State the guidelines for reaching and their application.(C-1)

1-6.8 Describe correct reaching for log rolls.(C-1)

1-6.9 State the guidelines for pushing and pulling.(C-1)

1-6.10 Discuss the general considerations of moving patients.(C-1)

1-6.11 State situations that may require the use of an emergency move.(C-1)

1-6.12 Identify the situations where the following patient carrying devices would be appropriate: (C-2)

- Wheeled ambulance stretcher
- Portable ambulance stretcher
- Stair chair
- Scoop stretcher
- Long spine board
- Basket stretcher
- Flexible stretcher

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

1-6.13 Explain the rationale for properly lifting and moving patients.(A-3)

PSYCHOMOTOR OBJECTIVES

1-6.14 Working in small groups, prepare each of the following devices for use, transfer a patient to the device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance:

- Wheeled ambulance stretcher
- Portable ambulance stretcher
- Stair chair
- Scoop stretcher

- Long spine board
- Basket stretcher
- Flexible stretcher (P-1,2)

1-6.15 Working with a partner, the EMT-Basic will demonstrate techniques for the transfer of a patient from an ambulance stretcher to a hospital stretcher.(P-1,2)

1-6.16 Working in small groups, demonstrate the techniques for:

- Emergency moves
- Urgent moves
- Non urgent moves

Preparation

Motivation: Many EMT-Basics are injured every year because they attempt to lift patients improperly.

Prerequisites: None

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to lifting and moving techniques. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Wheeled stretcher, stair chair, scoop stretcher, flexible stretcher, ambulance, long and short backboards, bed, *straps and blankets*

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in this area.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skills practice. Individuals used as assistant instructors should be knowledgeable about lifting and moving patients.

Recommended Minimum
Time to Complete: Three hours

Presentation

Declarative (What)

I. Body Mechanics
   A. Lifting techniques
      1. Safety precautions
         a. Use legs, not back, to lift.
         b. Keep weight as close to body as possible.
      2. Guidelines for lifting
         a. Consider weight of patient and need for additional help.
         b. Know physical ability and limitations.
         c. Lift without twisting.
         d. Have feet positioned properly.
         e. Communicate clearly and frequently with partner.
      3. Safe lifting of cots and stretchers. When possible use a stair chair instead of a stretcher if medically appropriate.
         a. Know or find out the weight to be lifted.
         b. Use at least two people.
         c. Ensure enough help available. Use an even number of people to lift so that balance is maintained.
         d. Know or find out the weight limitations of equipment being used.
         e. Know what to do with patients who exceed weight limitations of equipment.
         f. Using power-lift or squat lift position, keep back locked into normal curvature. The power-lift position is useful for individuals with weak knees or thighs. The feet are a comfortable distance apart. The back is tight and the abdominal muscles lock the back in a slight inward curve. Straddle the object. Keep feet flat. Distribute weight to balls of feet or just behind them. Stand by making sure the back is locked in and the upper body comes up before the hips.
         g. Use power grip to get maximum force from hands. The palm and fingers come into complete contact with the object and all fingers are bent at the same angles. The power-grip should always be used in lifting. This allows for maximum force to be developed. Hands should be at least 10 inches apart.
         h. Lift while keeping back in locked-in position.
         i. When lowering cot or stretcher, reverse steps.
         j. Avoid bending at the waist.
   B. Carrying
      1. Precautions for carrying - whenever possible, transport patients on devices that can be rolled.
      2. Guidelines for carrying
         a. Know or find out the weight to be lifted.
         b. Know limitations of the crew's abilities.

c. Work in a coordinated manner and communicate with partners.
d. Keep the weight as close to the body as possible.
e. Keep back in a locked-in position and refrain from twisting.
f. Flex at the hips, not the waist; bend at the knees.
g. Do not hyperextend the back (do not lean back from the waist).

3. Correct carrying procedure
   a. Use correct lifting techniques to lift the stretcher.
   b. Partners should have similar strength and height.
4. One-handed carrying technique
   a. Pick up and carry with the back in the locked-in position.
   b. Avoid leaning to either side to compensate for the imbalance.
5. Correct carrying procedure on stairs
   a. When possible, use a stair chair instead of a stretcher.
   b. Keep back in locked-in position.
   c. Flex at the hips, not the waist; bend at the knees.
   d. Keep weight and arms as close to the body as possible.

C. Reaching
1. Guidelines for reaching
   a. Keep back in locked-in position.
   b. When reaching overhead, avoid hyperextended position.
   c. Avoid twisting the back while reaching.
2. Application of reaching techniques
   a. Avoid reaching more than 15 - 20 inches in front of the body.
   b. Avoid situations where prolonged (more than a minute) strenuous effort is needed in order to avoid injury.
3. Correct reaching for log rolls
   a. Keep back straight while leaning over patient.
   b. Lean from the hips.
   c. Use shoulder muscles to help with roll.

D. Pushing and pulling guidelines
1. Push, rather than pull, whenever possible.
2. Keep back locked-in.
3. Keep line of pull through center of body by bending knees.
4. Keep weight close to the body.
5. Push from the area between the waist and shoulder.
6. If weight is below waist level, use kneeling position.
7. Avoid pushing or pulling from an overhead position if possible.
8. Keep elbows bent with arms close to the sides.

II. Principles of Moving Patients
A. General considerations
1. In general, a patient should be moved <u>immediately</u> (emergency move) only when:

a. There is an immediate danger to the patient if not moved.
(1) Fire or danger of fire.
(2) Explosives or other hazardous materials.
(3) Inability to protect the patient from other hazards at the scene.
(4) Inability to gain access to other patients in a vehicle who need life-saving care.
b. Life-saving care cannot be given because of the patient's location or position, e.g., a cardiac arrest patient sitting in a chair or lying on a bed.

2. A patient should be moved quickly (urgent move) when there is immediate threat to life.
a. Altered mental status
b. Inadequate breathing
c. Shock (Hypoperfusion)

3. If there is no threat to life, the patient should be moved when ready for transportation (non-urgent move).

B. Emergency moves
1. The greatest danger in moving a patient quickly is the possibility of aggravating a spine injury.
2. In an emergency, every effort should be made to pull the patient in the direction of the long axis of the body to provide as much protection to the spine as possible.
3. It is impossible to remove a patient from a vehicle quickly and at the same time provide as much protection to the spine as can be accomplished with an interim immobilization device.
4. If the patient is on the floor or ground, he can be moved by:
a. Pulling on the patient's clothing in the neck and shoulder area.
b. Putting the patient on a blanket and dragging the blanket.
c. Putting the EMT-Basic's hands under the patient's armpits (from the back), grasping the patient's forearms and dragging the patient.
d. Straddle slide to a long board

C. Urgent moves
1. Rapid extrication of patient sitting in vehicle
a. One EMT-Basic gets behind patient and brings cervical spine into neutral in-line position and provides manual immobilization.
b. A second EMT-Basic applies a cervical immobilization device as the third EMT-Basic first places long backboard near the door and then moves to the passenger seat.
c. The second EMT-Basic supports the thorax as the third EMT-Basic frees the patient's legs from the pedals.
d. At the direction of the second EMT-Basic, he and the third EMT-Basic rotate the patient in several short, coordinated

moves until the patient's back is in the open doorway and his feet are on the passenger seat.

e. Since the first EMT-Basic usually cannot support the patient's head any longer, another available EMT-Basic or a bystander supports the patient's head as the first EMT-Basic gets out of the vehicle and takes support of the head outside of the vehicle.

f. The end of the long backboard is placed on the seat next to the patient's buttocks. Assistants support the other end of the board as the first EMT-Basic and the second EMT-Basic lower the patient onto it.

g. The second EMT-Basic and the third EMT-Basic slide the patient into the proper position on the board in short, coordinated moves.

h. Several variations of the technique are possible, including assistance from bystanders. Must be accomplished without compromise to the spine.

D. Non-urgent moves

1. Direct ground lift (no suspected spine injury)

a. Two or three rescuers line up on one side of the patient.

b. Rescuers kneel on one knee (preferably the same for all rescuers).

c. The patient's arms are placed on his chest if possible.

d. The rescuer at the head places one arm under the patient's neck and shoulder and cradles the patient's head. He places his other arm under the patient's lower back.

e. The second rescuer places one arm under the patient's knees and one arm above the buttocks.

f. If a third rescuer is available, he should place both arms under the waist and the other two rescuers slide their arms either up to the mid-back or down to the buttocks as appropriate.

g. On signal, the rescuers lift the patient to their knees and roll the patient in toward their chests.

h. On signal, the rescuers stand and move the patient to the stretcher.

i. To lower the patient, the steps are reversed.

2. Extremity lift (no suspected extremity injuries)

a. One rescuer kneels at the patient's head and one kneels at the patient's side by his knees.

b. The rescuer at the head places one hand under each of the patient's shoulders while the rescuer at the foot grasps the patient's wrists.

c. The rescuer at the head slips his hands under the patient's arms and grasps the patient's wrists.

d. The rescuer at the patient's foot slips his hands under the

patient's knees.
e. Both rescuers move up to a crouching position.
f. The rescuers stand up simultaneously and move with the patient to a stretcher.

3. Transfer of supine patient from bed to stretcher
   a. Direct carry
      (1) Position cot perpendicular to bed with head end of cot at foot of bed.
      (2) Prepare cot by unbuckling straps and removing other items.
      (3) Both rescuers stand between bed and stretcher, facing patient.
      (4) First rescuer slides arm under patient's neck and cups patient's shoulder.
      (5) Second rescuer slides hand under hip and lifts slightly.
      (6) First rescuer slides other arm under patient's back.
      (7) Second rescuer places arms underneath hips and calves.
      (8) Rescuers slide patient to edge of bed.
      (9) Patient is lifted/curled toward the rescuers' chests.
      (10) Rescuers rotate and place patient gently onto cot.
   b. Draw sheet method
      (1) Loosen bottom sheet of bed.
      (2) Position cot next to bed.
      (3) Prepare cot: Adjust height, lower rails, unbuckle straps.
      (4) Reach across cot and grasp sheet firmly at patient's head, chest, hips and knees.
      (5) Slide patient gently onto cot.

III. Equipment
   A. Stretchers/cots
      1. Types
         a. Wheeled stretcher
            (1) Most commonly used device
            (2) Rolling
               (a) Restricted to smooth terrain.
               (b) Foot end should be pulled.
               (c) One person must guide the stretcher at head.
            (3) Carrying
               (a) Two rescuers
                  i) Preferable in narrow spaces, but requires more strength.
                  ii) Easily unbalanced.
                  iii) Rescuers should face each other from

opposite ends of stretcher.
(b) Four rescuers
i) One rescuer at each corner.
ii) More stability and requires less strength.
iii) Safer over rough terrain.
(4) Loading into ambulance
(a) Use sufficient lifting power.
(b) Load hanging stretchers before wheeled stretchers.
(c) Follow manufacturer's directions.
(d) Ensure all cots and patients secured before moving ambulance.
b. Portable stretcher
c. Stair chair
d. Backboards
(1) Long
(a) Traditional wooden device
(b) Manufactured varieties
(2) Short
(a) Traditional wooden device
(b) Vest type device
e. Scoop or orthopedic stretcher
f. Flexible stretcher
2. Maintenance - follow manufacturer's directions for inspection, cleaning, repair and upkeep.

B. Patient positioning
1. An unresponsive patient without suspected spine injury should be moved into the recovery position by rolling the patient onto his side (preferably the left) without twisting the body.
2. A patient with chest pain or discomfort or difficulty breathing should sit in a position of comfort as long as hypotension is not present.
3. A patient with suspected spine injury should be immobilized on a long backboard.
4. A patient in shock (Hypoperfusion) should have his legs elevated 8 - 12 inches.
5. For the pregnant patient with hypotension, an early intervention is to position the patient on her left side.
6. A patient who is nauseated or vomiting should be transported in a position of comfort; however, the EMT-Basic should be positioned appropriately to manage the airway.

Suggested Application

Procedural (how)

1. Show examples of proper lifting.
2. Show examples of proper carrying.
3. Show examples of proper reaching.
4. Show examples of situations where emergency moves are appropriate.
5. Show examples of situations where urgent moves are appropriate.
6. Show examples of situations where non-urgent moves are appropriate.
7. Demonstrate emergency moves.
8. Demonstrate urgent moves.
9. Demonstrate non-urgent moves.
10. Demonstrate transfer of patient to stretcher.
11. Show examples of different types of carrying devices.
12. Demonstrate knowledge of appropriate selection of each carrying device.
13. Demonstrate carrying a patient on a stretcher.
14. Demonstrate loading a patient on a stretcher into an ambulance.
15. Demonstrate use of a stair chair.
16. Demonstrate use of a scoop stretcher.
17. Demonstrate positioning patients with different conditions.
    A. Unresponsiveness
    B. Chest pain/discomfort or difficulty breathing
    C. Suspected spine injury
    D. Shock (Hypoperfusion)
    E. Patients who are vomiting or nauseous
    F. Pregnant patient
18. Demonstrate the straddle lift

Contextual (When, Where, Why)

When to transport a patient is determined by both the patient's condition and the environment in which he is found. The determination of how to transport the patient is made by considering his complaint, the severity of his condition and his location.

STUDENT ACTIVITIES

Auditory (Hear)

None identified for this lesson.

Visual (See)

1. The student should see proper lifting techniques.
2. The student should see proper carrying techniques.
3. The student should see proper reaching techniques.
4. The student should see situations where emergency moves are appropriate.
5. The student should see situations where urgent moves are appropriate.
6. The student should see situations where non-urgent moves are appropriate.
7. The student should see emergency moves.
8. The student should see urgent moves.
9. The student should see non-urgent moves.
10. The student should see a patient transferred to a stretcher.
11. The student should see different types of carrying devices.
12. The student should see a patient carried on a stretcher.

13. The student should see a patient on a stretcher loaded into an ambulance.
14. The student should see a stair chair used.
15. The student should see a scoop stretcher used.
16. The student should see a patient moved using the straddle lift.
16. The student should see patients programed with different conditions positioned properly:
    A. Unresponsiveness
    B. Chest pain/discomfort or difficulty breathing
    C. Suspected spine injury
    D. Shock (Hypoperfusion)
    E. Patients who are vomiting or nauseous
    F. Pregnant patient

Kinesthetic (Do)

1. The student should practice proper lifting techniques.
2. The student should practice proper carrying techniques.
3. The student should practice proper reaching techniques.
4. The student should practice determining whether emergency, urgent or non-emergency moves are appropriate.
5. The student should practice emergency moves.
6. The student should practice urgent moves.
7. The student should practice non-urgent moves.
8. The student should practice transferring a patient to a stretcher.
9. The student should practice carrying a patient on a stretcher.
10. The student should practice loading a patient on a stretcher into an ambulance.
11. The student should practice using a stair chair.
12. The student should practice using a scoop stretcher.
13. The student should practice positioning *programed* patients with different conditions.
    A. Unresponsiveness
    B. Chest pain/discomfort or difficulty breathing
    C. Suspected spine injury
    D. Shock (Hypoperfusion)
    E. Patients who are vomiting or nauseous
    F. Pregnant patients

INSTRUCTOR ACTIVITIES

Supervise student practice.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

Evaluation

Written: Develop evaluation instruments, e.g., examinations, verbal reviews, and handouts, to determine if the students have met the

cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice, or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Remediation

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

Suggested Enrichment

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's guide and attach with lesson plan.

MODULE 1
Preparatory

Lesson 1-7
Evaluation

Objectives

Objectives Legend

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level
2 = Application level
3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 1-1: Introduction to Emergency Care.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-3: Medical/Legal and Ethical Issues.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-4: The Human Body.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-6: Lifting and Moving Patients.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 1-1: Introduction to Emergency Care.
- Demonstrate knowledge of the affective objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate knowledge of the affective objectives of Lesson 1-3: Medical/Legal and Ethical Issues.
- Demonstrate knowledge of the affective objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate proficiency in the psychomotor objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate proficiency in the psychomotor objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.
- Demonstrate proficiency in the psychomotor objectives of Lesson 1-6: Lifting and Moving Patients.

Preparation

Motivation: Evaluation of the student's attainment of the cognitive and affective knowledge and psychomotor skills is an essential component of the EMT-Basic educational process. The modules are presented in a "building block" format. Once the students have demonstrated their knowledge and proficiency, the next lesson should be built upon that knowledge. This evaluation will help to identify students or groups of students having difficulty with a particular area. This is an opportunity for the instructor to evaluate their performance, and make appropriate modifications to the delivery of material.

Prerequisites: Completion of Lessons 1-1 through 1-6.

MATERIALS

AV Equipment: Typically none required.

EMS Equipment: Equipment required to evaluate the students' proficiency in the psychomotor skills of this module.

PERSONNEL

Primary Instructor: One proctor for the written evaluation.

Assistant Instructor: One practical skills examiner for each 6 students.

Recommended Minimum Time to Complete: One hour

Presentation

Declarative (What)

I. Purpose of the evaluation

II. Items to be evaluated

III. Feedback from evaluation

Suggested Application

Procedural (How)

1. Written evaluation based on the cognitive and affective objectives of Lessons 1-1 ----> 1-6.

2. Practical evaluation stations based on the psychomotor objectives of Lessons 1-1 ----> 1-6.

Contextual (When, Where and Why)

The evaluation is the final lesson in this module and is designed to bring closure to the module, and to assure that students are prepared to move to the next module.

This modular evaluation is given to determine the effectiveness of the presentation of materials and how well students have retained the material. This is an opportunity for the students to make necessary adjustments in study habits or for the instructor to adjust the manner in which material is presented.

INSTRUCTOR ACTIVITIES

Supervise student evaluation.
Reinforce student progress in cognitive, affective, and psychomotor domains.
Redirect students having difficulty with content (complete remediation forms).

Remediation

Identify students and/or groups of students who are having difficulty with this subject content. Complete a remediation sheet from the instructor's course guide. If students continue to have difficulty demonstrating knowledge of the cognitive and affective objectives, or demonstrating proficiency in psychomotor skills, the students should be counseled, remediated and re-evaluated. If improvements in cognitive, affective or psychomotor skills are not achieved, consideration regarding the ability of the student to progress in the program should be taken into account.